(A) By a cargo tank manufacturer holding an ASME ''U'' stamp, registered with DOT, and under the direction of a Design Certifying Engineer; or

(B) By a repair facility holding an ASME ''U'' stamp or a National Board ''R'' stamp, registered with DOT, and under the direction of a Design Certifying Engineer.

(ii) *ASME Code stamped cargo tank.* For an ASME Code stamped cargo tank, by a repair facility holding a National Board ''R'' stamp, registered in accordance with subpart F of part 107 of subchapter B of this chapter, and approved by a Design Certifying Engineer.

(7) If the mounting of a cargo tank on a cargo tank motor vehicle does not involve welding on the cargo tank head or shell, or a change or modification of the methods of attachment, then the mounting shall be in accordance with the original specification or with the specification in effect at the time of the mounting. If the mounting involves any change or modification of the methods of attachment, then the mounting must be approved by a Design Certifying Engineer.

(8) Prior to any modification, stretching, or rebarrelling a cargo tank must be emptied of any hazardous material lading. Cargo tanks containing flammable or toxic lading must be purged.

(9) Any modification, stretching, or rebarrelling on the cargo tank involving welding on the shell or head must be certified by a Registered Inspector. Any repair of an ASME Code ''U'' stamped cargo tank must be in accordance with the National Board Inspection Code.

(10) The suitability of any modification affecting the structural integrity of the cargo tank, with respect to pressure, must be determined by the testing required either in the applicable manufacturing specification, or in §180.407(g)(1)(iv).

(e) *Records.* Each owner of a cargo tank must retain at its principal place of business all records of repair, modification, stretching, or rebarrelling made to each cargo tank during the time the cargo tank is in service and for one year thereafter. Copies of these records must be retained by a motor carrier, who is not the owner of the cargo tank, at its principal place of business during the period the cargo tank is in the carrier's service. The seller of a specification cargo tank shall provide the purchaser a copy of the cargo tank Certificate of Compliance, and all repair, inspection and test reports upon sale as an MC or DOT cargo tank.

[Amdt. 180–7, 59 FR 55178, Nov. 3, 1994; 60 FR 17402, Apr. 5, 1995, as amended by Amdt. 180–10, 61 FR 51342, Oct. 1, 1996]

§180.415 Test and inspection markings.

(a) Each cargo tank successfully completing the test and inspection requirements contained in §180.407 must be marked as specified in this section.

(b) Each cargo tank must be durably and legibly marked, in English, with the date (month and year) and the type of test or inspection performed. The date must be readily identifiable with the applicable test or inspection. The marking must be in letters and numbers at least 32 mm (1.25 inches) high, on the tank shell near the specification plate or anywhere on the front head. The type of test or inspection may be abbreviated as follows: V for external visual inspection and test; I for internal visual inspection; P for pressure test; L for lining inspection, K for leakage test; and T for thickness test. For example, the markings ''10–95 P, V, L'' would indicate that in October 1995 the cargo tank received and passed the prescribed pressure test, external visual inspection and test, and the lining inspection.

(c) For a cargo tank motor vehicle composed of multiple cargo tanks constructed to the same specification, which are tested and inspected at the same time, one set of test and inspection markings may be used to satisfy the requirements of this section. For a cargo tank motor vehicle composed of multiple cargo tanks constructed to different specifications, which are tested and inspected at different intervals, the test and inspection markings must appear in the order of the cargo tank's

corresponding location, from front to rear.

[Amdt. 180–2, 56 FR 27879, June 17, 1991, as amended by Amdt. 180–3, 56 FR 66287, Dec. 20, 1991; 57 FR 45466, Oct. 1, 1992; Amdt. 180–6, 59 FR 49135, Sept. 26, 1994; Amdt. 180–10, 61 FR 51343, Oct. 1, 1996]

§ 180.416 Discharge system inspection and maintenance program for cargo tanks transporting liquefied compressed gases.

(a) *Applicability*. This section is applicable to an operator using specification MC 330, MC 331, and nonspecification cargo tanks authorized under § 173.315(k) of this subchapter for transportation of liquefied compressed gases other than carbon dioxide. Paragraphs (b), (c), (d)(1), (d)(5), (e), (f), and (g)(1) of this section, applicable to delivery hose assemblies, apply only to hose assemblies installed or carried on the cargo tank.

(b) *Hose identification*. By July 1, 2000, the operator must assure that each delivery hose assembly is permanently marked with a unique identification number and maximum working pressure.

(c) *Post-delivery hose check*. After each unloading, the operator must visually check that portion of the delivery hose assembly deployed during the unloading.

(d) *Monthly inspections and tests.* (1) The operator must visually inspect each delivery hose assembly at least once each calendar month the delivery hose assembly is in service.

(2) The operator must visually inspect the piping system at least once each calendar month the cargo tank is in service. The inspection must include fusible elements and all components of the piping system, including bolts, connections, and seals.

(3) At least once each calendar month a cargo tank is in service, the operator must actuate all emergency discharge control devices designed to close the internal self-closing stop valve to assure that all linkages operate as designed. appendix A to this part outlines acceptable procedures that may be used for this test.

(4) The operator of a cargo tank must check the internal self-closing stop valve in the liquid discharge opening for leakage through the valve at least once each calendar month the cargo tank is in service. On cargo tanks equipped with a meter, the meter creep test as outlined in appendix B to this part or a test providing equivalent accuracy is acceptable. For cargo tanks that are not equipped with a meter, appendix B to this part outlines one acceptable method that may be used to check internal self-closing stop valves for closure.

(5) After July 1, 2000, the operator must note each inspection in a record. That record must include the inspection date, the name of the person performing the inspection, the hose assembly identification number, the company name, the date the hose was assembled and tested, and an indication that the delivery hose assembly and piping system passed or failed the tests and inspections. A copy of each test and inspection record must be retained by the operator at its principal place of business or where the vehicle is housed or maintained until the next test of the same type is successfully completed.

(e) *Annual hose leakage test.* The owner of a delivery hose assembly that is not permanently attached to a cargo tank motor vehicle must ensure that the hose assembly is annually tested in accordance with § 180.407(h)(4).

(f) *New or repaired delivery hose assemblies.* Each operator of a cargo tank must ensure each new and repaired delivery hose assembly is tested at a minimum of 120 percent of the hose maximum working pressure.

(1) The operator must visually examine the delivery hose assembly while it is under pressure.

(2) Upon successful completion of the pressure test and inspection, the operator must assure that the delivery hose assembly is permanently marked with the month and year of the test.

(3) After July 1, 2000, the operator must complete a record documenting the test and inspection, including the date, the signature of the inspector, the hose owner, the hose identification number, the date of original delivery hose assembly and test, notes of any defects observed and repairs made, and an indication that the delivery hose assembly passed or failed the tests and